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X

**ON A SMALL COLLECTION OF BIRDS FROM
TORRES STRAIT ISLANDS, AND FROM GUA-
DALCANAR ISLAND, SOLOMON GROUP**

BY

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In the years 1920 and 1921, Mr. J. August Kusché visited Australia and the Papuan region for the purpose of assembling general natural history collections. Among the specimens he secured was a small number of birds from Prince of Wales and Thursday islands, Australia, and Guadalcanar Island, Solomon Group. These skins, now in the museum of the California Academy of Sciences, form the basis of the present paper.

None of the localities visited was an ornithological *terra incognita*. Torres Strait islands have been worked on several occasions by collectors. The bird life of certain of the islands has been quite thoroughly investigated, others still present opportunities for the study of their native fauna, and all are interesting because their position renders them suitable as observatories in the study of the migratory movements of Australian and Papuan birds. Both Prince of Wales and Thursday islands have already been ornithologically explored, but, despite this fact, the present assemblage of specimens includes species apparently not previously reported from Prince of Wales Island.

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Prince of Wales Island ($10^{\circ} 40' S.$, $142^{\circ} 10' E.$) is the largest of the islands of the group bearing that name. It is about 14 miles from the mainland, and covers an area of nearly 12 square miles. Thursday Island ($10^{\circ} 40' S.$, $142^{\circ} 20' E.$) lies to the northward, and is only about 900 acres in extent. All the islands of the group are hilly, and on them are peaks which rise to an elevation of nearly 700 feet. In former days, Prince of Wales Island supported a native population of about 500 persons, but at the present time the numbers are greatly reduced. The desultory mining operations carried on there have resulted in no extensive settlement as there is on Thursday Island, where Port Kennedy has become the metropolis of the Torres Strait pearl fisheries.

Lying off the eastern coast of New Guinea is the Solomon Group, of which Guadalcanar Island ($9^{\circ} 30' S.$, $165^{\circ} E.$) is one of the largest and best known. This island is about 82 miles long, and averages a breadth of 25 miles. Lofty forest-clad mountains rise in the eastern and southern portions, Mt. Lammas attaining an elevation of 8005 feet. The descent of these mountains to the sea is abrupt on the east and south, but to the north extend rolling prairies covered with high grass. From May to November the island is swept by the southeast trade wind, and during the period from December until April the inequitable northwest monsoon makes itself felt. These moisture-laden winds result in a coastal rainfall of 100 to 150 inches a year, and a precipitation in the mountains that is said to be between 400 and 500 inches annually. Several navigable rivers, flowing northward, aid in carrying off the surplus water.

In spite of the reputed ferocity of the natives, the Solomon Islands have received due attention from naturalists, and the labors of nineteenth century pioneers blazed a trail for more finished work on the part of their successors. In the 20th century, Lord Rothschild's interest in the Papuan islands has resulted in the amassing of excellent collections of birds from the Solomon Islands in Tring Museum, and his studies, and those of Hartert, have aided greatly in giving us a comprehensive knowledge of their avifauna. Nevertheless, there remain to be learned many facts in variation, distribution, and migration. It is, therefore, to be regretted that the collection

here under consideration lacks detailed information regarding the localities in which the collecting was done. But facts obtained from the specimens themselves seem worthy of presentation.

In its entirety, Mr. Kusche's collection comprised 138 bird skins, representing 56 species and subspecies. From July 20 to August 18, inclusive, 1920, examples of 27 species were taken on Prince of Wales Island; during five days of September (7 to 11, inclusive), specimens of eight species were secured on Thursday Island; and between November 26, 1920, and January 30, 1921, representatives of 25 species were added to the collection on Guadalcanar Island. Ten *Megapodius* eggs were obtained on Savo Island, off Guadalcanar Island, on February 18, 1921.

LIST OF SPECIES

1. *Megapodius reinwardt brenchleyi* Gray

Nos. 2996-3005: eggs, February 18; Savo Island.

The incubation of one of these eggs had begun, the remainder were fresh. The ground color of these eggs varies from almost pure white to light buff (Ridgway). The overlying color ranges from pinkish buff, through a pale isabella, to avellaneous. Oates¹ gives 2.8 (71.2 mm.) and 3.05 (77.5 mm.) inches in length, and 1.75 (44.5 mm.) and 1.9 (48.2 mm.) inches in breadth as the extreme measurements of his series. The extremes exhibited by the Academy's series are: 73.7 mm. and 81.0 mm. in length, and 45.2 mm. and 49.1 mm. in breadth.

2. *Ptilinopus regina* Swainson

Nos. 24410-11: female, August 16; male, August 17; Prince of Wales Island.

Both birds are in fresh plumage. The coloration of No. 24410, female, is very intense for one of that sex. On the under tail-coverts of this example, a bar of orange-red intervenes between the narrow yellow tip of the feather and a

¹ Cat. Birds' Eggs Brit. Mus., I, 1901, p. 16.

central band of magenta. The presence of this last color is apparently unusual, and it is not mentioned in the descriptions of the species given by Salvadori² or Mathews.³

3. *Ptilinopus superbus* (Temminck)

No. 23312: male, August 16, 1920; Prince of Wales Island.

Fresh plumage has just been assumed. "Eyes red-brown. Legs and feet blood-red. Call, a low *u u i i i*" (Kusche).

4. *Jotreron viridis lewisi* (Ramsay)

No. 22425: female, January 18; Guadalcanar Island.

"Bill orange-yellow. Legs and feet crimson" (Kusche). The feathers of the forehead and chin are gray tipped with green.⁴

5. *Megaloprepia magnifica assimilis* (Gould)

Nos. 24407-08: male, August 18; female, August 17; Prince of Wales Island. No. 24409: male, September 10; Thursday Island.

The specimens at hand differ from the *Megaloprepia assimilis* (= *M. m. kerri* Mathews) figured by Mathews⁵ in having the fresh feathers of the upper parts a more golden green with bronze reflections. The breast feathers are apically Indian purple (Ridgway), and a subterminal band of dark madder violet (Ridgway) intervenes between that color and the succeeding green area. The measurements (in millimeters) of the series at hand are as follows: Culmen, 15.5, 14.5, 16.5; wing, 180.0, 181.0, 183.0; tail, 148.0, 156.0, 145.0; tarsus, 23.5, 22.0, 22.5. In size these birds appear to approach *M. m. poliura*, but differ from individuals of that race in having the under tail-coverts washed with gamboge.

² Cat. Birds Brit. Mus., XXI, 1893, p. 95.

³ B. Austr., I, 1910-11, pp. 105, 107.

⁴ Cf. Salvadori, Cat. Birds Brit. Mus., XXI, 1893, p. 153; Hartert, Nov. Zool., II, 1895, p. 63, footnote; and Rothschild & Hartert, Nov. Zool., VIII, 1901, p. 109.

⁵ B. Austr., I, pl. 26.

According to a note on the label, the oviduct of the female contained two ova.

6. *Globicera rufigula* (Salvadori)

No. 24424: male, December 3; Guadalcanar Island.

A moult, involving contour plumage as well as remiges and rectrices, is nearly complete.

7. *Chrysauchœna humeralis humeralis* (Temminck)

No. 24414: female, July 28; Prince of Wales Island.

8. *Geopelia placida placida* Gould

No. 24413: male, August 3; Prince of Wales Island.

9. *Calcenas nicobarica nicobarica* Linnæus

Nos. 24445-48: females, January 2 and 9; males, January 17 and 27; Guadalcanar Island.

10. *Porphyrio indicus neobritannicus* Meyer

No. 24422: male, December 2; Guadalcanar Island.

In the specimen under examination the foreneck and breast are greenish cobalt, in distinct contrast to the remainder of the under parts. The thighs and abdomen are concolor. For birds exhibiting these characters, Hartert⁶ has presented cogent arguments for the use of the specific name *indicus* Horsfield, rather than *calvus* Vieillot. But, unless it proves that representatives of two species of *Porphyrio* are resident in the Solomon Islands, it will be necessary to regard *neobritannicus* as a race of *indicus*, not of *melanotus*.⁷

⁶ Nov. Zool., XXXI, 1924, pp. 105-106.

⁷ Cf. Hartert, Nov. Zool., XXXI, 1924, p. 108; Mathews, Syst. Av. Austr., 1927, p. 101.

11. *Pluvialis dominicus fulvus* (Gmelin)

No. 24442: female, January 11; Guadalcanar Island.

The remiges are only slightly worn, but the remainder of the plumage is much abraded.

12. *Actitis hypoleucos* (Linnæus)

No. 24894: female, August 17; Prince of Wales Island.

This is a bird in worn garb.

13. *Orthorhamphus magnirostris neglectus* (Mathews)

No. 24423: male, January 17; Guadalcanar Island.

14. *Demigretta sacra novæguineæ* (Gmelin)

Nos. 24416-17: male, January 12; female, January 30; Guadalcanar Island. No. 24418: specimen without data.

The subspecific name has been but tentatively applied to these specimens. The female is almost pure white. A few dark streaks appear in the contour plumage, and dark tips are in evidence on some of the remiges and rectrices. The plumage of the male is devoid of white, and the dataless example has a white line on the throat. The specimens yield the following measurements (in millimeters): Culmen, 86.0, 85.0, 85.0; wing, 295.0, 265.0 (worn), —; tail, 98.5, 90.0, —; tarsus, 75.7, 70.5, 74.0. In size these specimens approach a female collected at Apia, Samoa, which measures: Culmen, 84.5; wing, 265.0 (worn); tail, 94.0; tarsus, 70.0.

15. *Nycticorax caledonicus hilli* Mathews

No. 24415: male, September 9; Thursday Island.

This bird appears to be much paler than that figured by Mathews.⁸ The mantle is fawn, but approaches mars brown (Ridgway) on the interscapulars.

⁸ B. Austr., III, pl. 193.

16. *Anas superciliosa pelewensis* Hartlaub & Finsch

No. 24421: male, November 26; Guadalcanar Island.

17. *Leucospiza hiogaster pulchella* (Ramsay)

Nos. 24405-06, 24436-38: immature males, December 26 and 30; adult male, January 18; immature female, January 5; adult female, January 23; Guadalcanar Island.

The adult female is in greatly worn dress.

18. *Haliastur indus ambiguus* Brüggemann

Nos. 24419-20: female, December 22; male, December 23; Guadalcanar Island.

"Iris brown. Bill ochre. Legs yellow. The stomach of the male contained a bird" (Kusche).

19. *Eos grayi* Mathews & Iredale

Nos. 24364-68: males, December 4 and 28, and January 8; female, January 8; Guadalcanar Island.

A moult which involves all the feather tracts is in evidence in these examples.

20. *Trichoglossus hæmatodus aberrans* Reichenow

Nos. 24361-63: female, December 4; males, December 4 and January 8; Guadalcanar Island.

These specimens have the occiput purplish brown and the throat purple. In two individuals the unspotted dark green area of the central abdomen is quite evident. The plumage in every case is much worn, but feather renewal has begun on the forehead, crown, and flight feathers.

21. *Kakatoë galerita fitzroyi* (Mathews)

Nos. 24371-73: female, August 7; males, August 8; Prince of Wales Island.

The auriculars of these examples are strongly tinged with yellow, in this respect differing from the type of *fitzroyi* as

described by Mathews.⁹ The measurements (in millimeters) of the series are: Culmen, 37.0, 37.2, 42.0; wing, 305.0, 298.0, 316.0; tail, 159.0, 164.0, 175.0; tarsus, 24.0, 24.5, 25.0.

22. *Ducorpsius ducorpsii* Pucheran

Nos. 24369-70: female, January 5; male, January 6; Guadalcanar Island.

The basal reddish orange of the feathers of the lores, sides of head, nape, throat, breast, flanks, and upper tail-coverts is quite conspicuous in the case of the male. The presence of this color is mentioned by Finsch,¹⁰ but it is ordinarily disregarded in descriptions of this species.

23. *Lorius roratus solomonensis* (Rothschild & Hartert)

No. 24360: female, January 22; Guadalcanar Island.

The contour plumage has been recently assumed, but all but one rectrix and the outer primaries have still to be replaced.

24. *Megapodargus papuensis baileyi* (Mathews)

No. 24316: male, July 28; Prince of Wales Island.

25. *Eurystomus orientalis solomonensis* Sharpe

Nos. 24312-15: males, December 20 and 21; female, December 22; Guadalcanar Island.

A white patch is present on the chin of each of the specimens. "Iris ruby red. Bill and legs vermilion" (Kusche).

26. *Dacelo leachii kempii* Mathews

Nos. 24303-08: adult male, August 4; males [adult females], July 27; females [immature males], July 29 and August 4; Prince of Wales Island.

⁹ Nov. Zool., XVIII, 1911, p. 264.

¹⁰ Papag., I, 1867, p. 312.

An immature male (labeled "female") taken on August 4, has the tail basally dark blue, and only slight indications of brown are present on the outer webs of the lateral rectrices. A somewhat younger male, labeled "female," has the proximal two-thirds of the tail dark blue, and the distal portion brown banded with blue. The rectrices of this specimen are quite narrow, the central ones measuring six and the lateral ones four millimeters less than the corresponding feathers of the adult bird. Two birds taken on July 27 are marked as "males"; but, although they appear to be older than the immature male dated July 29, there is no indication of an advance into the plumage of the adult male, the tails being brown to the base.

In these examples the white of the throat merges into light cream buff (Ridgway) on the breast and abdomen. The amount of dark vermiculation on the under surface is variable. One adult female is very heavily marked, but the lower parts of the adult male are very faintly lined.

27. *Lazulena macleayii macleayii* (Jardine & Selby)

No. 24310: female, July 29; Prince of Wales Island.

28. *Sauropatis sancta confusa* (Mathews)

No. 24309: female, August 4; Prince of Wales Island.
No. 24308: male, September 7; Thursday Island.

The female (apparently immature) has feather renewal in progress on the occiput, cervix, and entire under parts.

29. *Sauropatis chloris alberti* Rothschild & Hartert

No. 24311: female, December 4; Guadalcanar Island.

This individual has the pale occipital spot, said to characterize *alberti*,¹¹ but there is evidence of the very narrow superciliary line to be found in "*perplexa*" (= *Sauropatis chloris solomonis*).¹²

¹¹ Rothschild & Hartert, Nov. Zool., XV, 1908, p. 361.

¹² Rothschild & Hartert, Nov. Zool., XV, 1908, p. 361.

30. *Rhytoceros plicatus mendanæ* Hartert

Nos. 24431-35: male [not sexed], December 3; male, December 25; males [females], January 3 and 17; female [immature male], December 25; Guadalcanar Island.

Two black-headed individuals collected on January 3 and 17 are clearly females, although they are labeled "males." An immature bird, with an ochraceous-tawny head, is marked "female." This example is just acquiring adult plumage, and new feathers are appearing in the contour plumage of the other birds. "Iris yellowish brown. Base of bill dull crimson. Skin below bill light blue" (Kusche).

31. *Cosmærops ornatus ornatus* (Latham)

Nos. 24339-44: males, July 25 and 30, August 2 and 14; female, August 4; Prince of Wales Island.

A male taken on August 14 is undergoing extensive replacement of the body feathers. The remainder of the specimens appear to be in unworn garb. A few undeveloped feathers are in evidence on chin and throat.

32. *Lamprococcyx russatus* (Gould)

Nos. 24355-56: males, July 25 and 29; Prince of Wales Island.

According to the collector, the iris of the bird taken on July 25 was red, that of the one secured on July 29, dark brown. The assumption of new plumage is just begun on the head and throat.

33. *Polophilus phasianinus melanurus* (Gould)

No. 24322: male, July 27; Prince of Wales Island.

This is an individual in striped plumage. "Iris black. Upper mandible straw yellow, lower mandible white. Legs and feet blue-gray" (Kusche).

34. *Nesocentor milo milo* (Gould)

Nos. 24426-30: males, December 21, January 10 and 11; females, January 2 and 12; Guadalcanar Island.

Fresh flight feathers are being acquired by one of the males and one female. A male in its first contour plumage has a few pin feathers still present on the rump and abdomen.

35. *Kempia flavigaster terræreginæ* (Mathews)

No. 24452: male, August 10; Prince of Wales Island.

36. *Pachycephala astrolabi* Bonaparte

Nos. 24337-38, 24455: males and immature female, November 30; Guadalcanar Island.

The immature female has the upper surface, including the tail, bright yellowish olive, the head and interscapulars being strongly washed and pied with kaiser brown. There are faint indications of a yellow cervical collar. The inner webs of the lateral rectrices are narrowly margined with pale cinnamon buff. Externally the wing is kaiser brown, and the throat, forebreast, and auriculars are washed with the same shade. The under tail-coverts are lemon yellow, which, also, suffuses the lower breast and abdomen. The lower surface is obsoletely streaked by the dusky shaft stripes of the feathers.

37. *Leucocirca leucophrys* (Latham)

No. 24451: male, January 7; Guadalcanar Island.

38. *Mastersornis rubecula yorki* (Mathews)

No. 24391: male, August 10; Prince of Wales Island.

This individual is an immature bird in the garb of a female. The plumage is greatly worn, and no fresh feathers are in evidence.

39. *Graucalus novæhollandiæ connectens* (Mathews)

Nos. 24329-31: male, July 30; females, August 1 and 2; Prince of Wales Island. No. 24332: female, September 7; Thursday Island.

The black is wanting from the forehead of the male, and the throats of all the examples are freckled. The plumage in every case is greatly abraded, but new rectrices being developed by the female taken on September 7 are the only evidence of feather replacement. In view of Campbell's¹³ record of an unusual specimen from the Torres Strait islands, the measurements of this series may be of interest. Culmen, 26.5, 26.0, 26.0, 28.0; wing, 190.0, 192.0, 192.0, 193.0, 189.0; tail, 130.0, 143.5, 135.0, 138.0; tarsus, 28.0, 30.0, 28.5, 28.0.

40. *Graucalus hypoleucus stalkerii* (Mathews)

Nos. 24333-36: males, July 27 and August 1; females, July 27 and 29; Prince of Wales Island.

The characters of *hypoleucus*, rather than those of *papuensis*,¹⁴ appear to be exhibited by this series. In every case the throat is white, and the secondaries exhibit distinct white margins. A plumage renewal, which has already affected the secondaries, lateral rectrices, and throats of three of the specimens, is in progress.

41. *Karua leucomela yorki* (Mathews)

Nos. 24357-59, 24392: female [male], July 29; females, August 2, 3, and 14; Prince of Wales Island.

A specimen taken on July 29 wears the dress of the male although it is marked "female" by the collector. The under tail-coverts appear to be rather pale in this series, but the vermiculations on the under surface of the females are quite pronounced. The inner secondaries have been recently acquired in all the examples, and a few pin feathers are present on the throat of the female taken on August 2.

¹³ Emu, XX, 1920-21, p. 61.

¹⁴ Cf. Hartert, Nov. Zool., XII, 1905, p. 224; Ogilvie-Grant, Ibis, 1915, Jubilee Suppl., No. 2, p. 128; Campbell, Emu, XX, 1920-21, p. 61; and Mathews, B. Austr., IX, 1921-22, p. 126.

42. *Edoliisoma erythropygium erythropygium* Sharpe

No. 24456: male [female], December 31; Guadalcanar Island.

This specimen, in newly acquired contour plumage, although marked "male," seems to possess the characters ascribed to the adult female of this species.

43. *Sphecotheres flaviventris flaviventris* Gould

Nos. 24345-51, 24353: males, August 15, 16, 17, and 18; female [immature male], August 16; Prince of Wales Island. No. 24352: male, September 9; Thursday Island.

The immature (marked "female") is just passing into the plumage of the adult male. A moult involving all the feather tracts is well advanced in two instances; in others, the renewal of the plumage has only barely begun.

44. *Artamus leucorhynchus leucopygialis* Gould

No. 24354: male, July 25; Prince of Wales Island.

45. *Caleya megarhyncha griseata* (Mathews)

Nos. 24453-54: male, September 7; female, September 9; Thursday Island.

46. *Microchelidon hirundinacea yorki* (Mathews)

Nos. 24381-82: males, August 12 and 17; Prince of Wales Island.

Both individuals are possessed of the short tail supposed to characterize this race. This feature measures 26.5 and 26.2 mm. in the specimens in hand. Mathews¹⁵ gives 28.0 mm. as the tail length of the type of this subspecies and 32.0 mm. for *hirundinacea*.

¹⁵ Nov. Zool., XVIII, 1911, p. 387.

47. *Cyrtostomus frenatus australis* (Gould)

Nos. 24374-79: males, July 25, 26, and 29; female, July 25; Prince of Wales Island.

The adult males of this series have the breast and abdomen light cadmium (Ridgway) rather than lemon yellow as has *macgillivrayi*. The bills measure 20 and 21 mm. An immature male, collected on July 26, has metallic feathers appearing on the throat. The renewal of the body plumage of the remainder of the specimens is well advanced.

48. *Cyrtostomus frenatus flavigastra* (Gould)

No. 24380: male, January 7; Guadalcanar Island.

This example is an immature individual. A renewal of the flight feathers, as well as of the contour plumage, is in progress.

49. *Myzomela erythrocephala kempii* Mathews

Nos. 24320-21: males, September 11; Thursday Island.

50. *Melomyza obscura munna* (Mathews)

Nos. 24317-19: females, July 26 and 27, and August 9; Prince of Wales Island.

The measurements of this series (in millimeters) are: Culmen, 19.0, 18.5, 18.5; wing, 68.0, 70.5, 68.0; tail, 52.0, 55.0, 54.0; tarsus, 18.5, 18.1, 18.0. For a female from Cape York, Mathews¹⁶ gives the following measurements: Culmen, 15.0; wing, 60.0; tail, 45.0; tarsus, 18.0. The type of *apsleyi*, a male, from Melville Island measures: Culmen, 18.0; wing, 72.0; tail, 55; tarsus, 19.0. It would seem, therefore, that the birds from Prince of Wales Island approach more nearly in size those from Melville Island than they do those from the adjacent mainland.

The feather replacement of the specimen taken on August 9 is nearly complete, and it is well under way in the other individuals.

¹⁶ B. Austr., XI, 1923-24, p. 331.

51. *Dorothina lewinii ivi* (Mathews)

Nos. 24439-41: males, August 10 and 18; female, August 12; Prince of Wales Island.

52. *Neophilemon orientalis yorki* (Mathews)

Nos. 24323-28: males, July 24, 26, and 27; females, July 20 and August 1; Prince of Wales Island.

The collector has indicated that in two females the irides were "blood-red," and in one male that they were "gray."

53. *Mimeta sagittata subaffinis* (Mathews)

Nos. 24393-95: male, July 26; females, August 10 and 13; Prince of Wales Island.

The extent of the white on the rectrices of these examples varies considerably. The measurements yielded are: Culmen, 30.0, 30.0, 31.5; wing, 145.0, 142.0, 144.0; tail, 107.0, 104.0, 103.0; tarsus, 25.0, 22.5, 24.5.

54. *Neomimeta flavocincta kingi* (Mathews)

Nos. 24396-97: male and female, September 10; Thursday Island.

The contour plumage of both specimens is fresh, but the replacement of flight feathers has only commenced.

55. *Acridotheres tristis tristis* (Linnæus)

No. 24402: male, December 7; Guadalcanar Island.

56. *Lamprocorax cantoroides cantoroides* (Gray)

No. 24443: male, November 30; Guadalcanar Island. "Iris orange" (Kusche).

57. *Metallopsar metallicus nitidus* (Gray)

No. 24444: immature male, November 30; Guadalcanar Island.

A single individual, in its first contour feathers, appears to belong under this head. The pileum is dark brown slightly glossed with purple. The dark brown feathers of the cervix are margined with a paler shade, producing an ill-defined, striped collar. The throat is narrowly, and the remainder of the under surface broadly, streaked with blackish brown on a white or buffy white ground. The flanks are dark brown.